Claims:

1. A method of manufacturing a composite fluted sheeting material comprising at least two surfaces interspersed with a plurality of substantially parallel spaced webs forming a plurality of elongate semi closed cells, and a filler material set within said cells; the method including the steps of:

(a) applying a blank fluted sheet to a receiving station;

(b) preparing a filler material for delivery to a filling station;

(c) moving said blank sheet and/or said filling station relative to each other such that said filling station moves in a linear direction transversely across the open ends of said elongate semi closed cells of said sheet;

(d) dispensing said filler material to said cells;

(e) allowing said filler material to set.

2. A method according to claim 1 wherein said receiving station includes a transporting means for moving said blank fluted sheet in a linear direction coplanar with said sheet.

3. A method according to claim 2 wherein said transporting means includes a conveyor means.

4. A method according to any one of claims 1 to 3 wherein said filling station is fixed relative to said receiving station.

5. A method according to any one of claims 1 to 4 wherein said receiving station includes an inclined loading table adapted to incline said sheeting material positioned thereon in a direction longitudinal to said cells.

6. A method according to claim 5 wherein said fitting station is positioned at the elevated end of said inclined sheets to facilitate gravity assisted delivery of said filler to said cells.

7. A method according to any one of claims 3 to 6 wherein said conveyor means includes a plurality of conveyors.

8. A method according to claim 7 wherein said conveyors include an upper and lower conveyor to receive the upper and lower ends of said sheet respectively.

9. A method according to claim 8 wherein the upper conveyor means includes a jockey conveyor adapted to oppose said upper conveyor so as to sandwich the upper end of said sheet.

10. A method according to claim 9 wherein said jockey conveyor operates at least in the region of said filling station.

11. A method according to any one of claims 1 to 10 wherein said filling station includes a mixing means which may be a mixing tube, and an injection head.

12. A method according to claim 11 wherein said injection head includes a nozzle assembly configured to cooperate with the open cell ends of said blank sheet.

13. A method according to claim 12 wherein said nozzle assembly is adapted to move between an advanced and retracted position so as to allow said nozzle assembly to be moved into and out of said open cells.

14. A method according to claim 13 wherein said nozzle assembly includes a compliant stopper to assist in sealing at the open cell ends of said sheet during filling when said nozzle assembly is in said advanced position.

15. A method according to any one of claims 12 to 15 wherein said nozzle assembly includes one or a plurality of nozzles.

16. A method according to any one of claims 13 to 15 wherein the movement of said injection head is coordinated with the linear movement of said sheet such that the injection head advances to seal the open cell or cells of said sheet for filling and retracts to allow said sheet to move laterally and present empty cells for filling.

17. A method according to any one of claims 1 to 16 wherein said filler material is delivered by a pumping station.

18. A method according to any one of claims 1 to 17 wherein said filling material is an expanding setting foam.

19. A method according to claim 18 wherein said foam is a polyurethane.

20. A method according to claim 19 wherein said foam is adapted for rapid and expanding setting once mixed.

21. A method according to claim 30 wherein said foam is based on POLYOL™ resin and a suitable hardener.

22. A method according to claim 21 wherein said resin is subjected to micro-air nucleation post supply to said filling station and prior to entry to said mixing tube.

23. A method according to any one of claims 1 to 22 wherein said filler is dispensed at a temperature of about 22 degrees centigrade.

24. A machine for use in accordance with the method of any one of claims 1 to 23 comprising:

(a) a receiving station adapted for receiving a blank fluted sheet having elongate semi-closed cells; and

(b) a filling station for dispensing a filler into the cells of said fluted sheet.

25. A machine according to claim 24 wherein said receiving station includes an inclined loading table and a transporting means for moving said blank fitted sheet in a linear direction coplanar with said sheet.

26. A machine according to claim 25 wherein said transporting means includes a conveyor means.

27. A machine according to claim 26 wherein said conveyor means includes two conveyor belts positioned at the upper and lower end respectively of said inclined loading table to receive the upper and lower end of said fluted sheet.

28. A machine according to claim 27 wherein said transporting means further includes a jockey conveyor belt opposing said upper conveyor belt at least in the region of said filling station.

29. A machine according to any one of claims 24 to 28 wherein said filling station is mounted to said receiving station.

30. A machine according to any one of claims 24 to 29 wherein said filling station includes a mixing means and an injection head.

31. A machine according to claim 30 wherein said injection head is adapted for reciprocating movement to repeatedly advance toward and retract away from the open cells of said sheet.

32. A machine according to claim 30 or 31 wherein said injection head includes a plurality of nozzles adapted to extend into said open cells during filling and retract out of said open cells as the injector head is withdrawn.

33. A machine according to any one of claims 30 to 32 wherein said injector head includes a stopper to seal the injection/sheet interface.

34. A machine according to any one of claims 24 to 33 including a pumping station for supplying filler components to said filler station.

35. A machine according to claim 34 wherein said pumping station includes temperature controlled reservoir tanks for the filler components.

36. A composite sheet material when made in accordance with the method of any one of claims 1 to 22.

37. A method according to any one of claims 1 to 23 substantially as hereinbefore described with reference to the examples.

38. A machine according to any one of claims 24 to 35 substantially as hereinbefore described with reference to the examples.

39. A composite sheet according to claim 36 substantially as hereinbefore described with reference to the examples.